

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: 10/734,692

Source: _____

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RAW SEQUENCE LISTING

DATE: 06/06/2005

PATENT APPLICATION: US/10/734,692

TIME: 08:02:11

Input Set : N:\Crf4\Refhold\10_folder\J734692.raw

Output Set: N:\CRF4\06062005\J734692.raw

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1 <110> APPLICANT: Stashenko, Philip
2   Okamatsu, Yoshimura
3   Sasaki, Hajime
4   Battaglino, Richard
5   Spaete, Ulrike
6 <120> TITLE OF INVENTION: Expressed Genes that Define the Osteoclast Phenotype
7 <130> FILE REFERENCE: 25669-003
8 <140> CURRENT APPLICATION NUMBER: US/10/734,692
9 <141> CURRENT FILING DATE: 2003-12-11
10 <150> PRIOR APPLICATION NUMBER: 60/432,700
11 <151> PRIOR FILING DATE: 2002-12-11
12 <160> NUMBER OF SEQ ID NOS: 49
13 <170> SOFTWARE: PatentIn version 3.2
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16 <211> LENGTH: 22
17 <212> TYPE: DNA
18 <213> ORGANISM: Mus musculus
19 <400> SEQUENCE: 1
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23 <211> LENGTH: 23
24 <212> TYPE: DNA
25 <213> ORGANISM: Mus musculus
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30 <211> LENGTH: 1118
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36   agtccagagc agtctgaagg cacagcaagg gcttgaaatt gaaatgtttc acatgggctt      180
37   tcaagactct tcagattgct gcctgtccta taactcacgg attcagtgtt caagatttat      240
38   aggttatctt cccaccagtg gtgggtgtac caggccgggc atcatcttta tcagcaagag      300
39   ggggttccag gtctgtgcca accccagtga tcggagagtt cagagatgca ttgaaagatt      360
40   ggagaaaaac tcacaaccac ggacctacaa acaataacat ttgctttaga gaagggtgtg      420
41   aactgccagc tactttcttt ggtcttcccc agtgaccacc taagtggctc taagtgttta      480
42   tttttatagg tatataaaca tttttttttt ctgtttccac tttaaagtgg catatctggc      540
43   tttgtcacag aggggaaaact tgtctgtgcc aaccccagtc atctgaaaac tcagatgcct      600
44   gggaaggctc gaagctgacc tcaatgacta cacataatat ttgattgaga taaatgggca      660
45   aggtctggag agatggcttg gtgggttaaga gcacctgctg ctcttccaga ggacctgggt      720
46   tcaattccca cttagatggc agctcaaaact atctataatt ccaattccaa agaaaactga      780

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47      tgcacctattt tgccctttta gttagtagta tttacagtat tctttataaa ttcaccttga      840
48      catgaccatc ttgagctaca gccatcctaa ctgcctcaga atcactcaag ttcttccact      900
49      cggtttccca gcggtatttta agtggataaa ctgtgagagt ggtctgtggg actttggaat      960
50      gtgtctgggt ctgatagtca cttatggcaa cccaggtaga ttcaactagg atgaaataaa      1020
51      ttctgcctta gccccagtagt atgtctgtgt ttgtaaggac ccagctgatt ttcccaccac      1080
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55 <211> LENGTH: 122

56 <212> TYPE: PRT

57 <213> ORGANISM: Mus musculus

58 <400> SEQUENCE: 4

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61      Leu Gly Ile Trp Ala Gln Ile Thr His Ala Thr Glu Thr Lys Glu Val
62      20          25          30
63      Gln Ser Ser Leu Lys Ala Gln Gln Gly Leu Glu Ile Glu Met Phe His
64      35          40          45
65      Met Gly Phe Gln Asp Ser Ser Asp Cys Cys Leu Ser Tyr Asn Ser Arg
66      50          55          60
67      Ile Gln Cys Ser Arg Phe Ile Gly Tyr Phe Pro Thr Ser Gly Gly Cys
68      65          70          75          80
69      Thr Arg Pro Gly Ile Ile Phe Ile Ser Lys Arg Gly Phe Gln Val Cys
70      85          90          95
71      Ala Asn Pro Ser Asp Arg Arg Val Gln Arg Cys Ile Glu Arg Leu Glu
72      100          105          110
73      Lys Asn Ser Gln Pro Arg Thr Tyr Lys Gln
74      115          120

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76 <210> SEQ ID NO: 5

77 <211> LENGTH: 2156

78 <212> TYPE: DNA

79 <213> ORGANISM: Homo sapiens

80 <400> SEQUENCE: 5

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83      atgcaactcc gtgccagaag gtgaacgaga gggccttttg ggcccaactg ctgccccctc      180
84      tgtactcctt ggtatttgtc attggcctgg ttggaaacat cctgggtgggc ctgggtccttg      240
85      tgcaatacaa gaggctaaaa aacatgacca gcatctacct cctgaacctg gccatttctg      300
86      acctgctctt cctgttcacg cttcccttct ggatcgacta caagttgaag gatgactggg      360
87      tttttggtga tgccatgtgt aagatcctct ctgggtttta ttacacaggc ttgtacagcg      420
88      agatcttttt catcatcctg ctgacgattg acaggtagct ggccatcgtc cagcccggtg      480
89      ttgccttgcg ggcacggacc gtcacttttg gtgtcatcac cagcatcatc atttgggccc      540
90      tggccatctt ggcttccatg ccaggcttat acttttccaa gacccaatgg gaattcactc      600
91      accacacctg cagccttcac tttcctcacg aaagcctacg agagtggaag ctgtttcagg      660
92      ccttgaaact gaacctcttt gggctgggtat tgcctttggt ggtcatgac atctgctaca      720
93      cagggattat aaagattctg ctaagacgac caaatgagaa gaaatccaaa gctgtccggt      780
94      tgatttttgt catcatgac atcttttttc tcttttggac cccctacaat ttgactatac      840
95      ttatttctgt tttccaagac ttctgttca cccatgagtg tgagcagagc agacatttgg      900
96      acctggctgt gcaagtgcg gaggtgatcg cctacacgca ctgctgtgtc aaccagtg      960
97      tctacgcctt cgttggtgag aggttccgga agtacctgcg gcagttgttc cacaggcg      1020

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99      gctccacatc tccctccaca ggggagcatg aactctctgc tgggttctga ctcagaccat 1140
100     aggaggccaa cccaaaataa gcaggcgtga cctgccaggc acactgagcc agcagcctgg 1200
101     ctctcccagc caggttctga ctcttggcac agcatggagt cacagccact tgggatagag 1260
102     aggggaatgta atgggtggcct ggggcttctg aggccttctgg ggcttcagtc ttttccatga 1320
103     acttctcccc tggtagaaaag aagatgaatg agcaaaaacca aatattccag agactgggac 1380
104     taagtgtacc agagaagggc ttggactcaa gcaagatttc agatttgtga ccattagcat 1440
105     ttgtcaacaa agtcacccac ttcccactat tgcttgacaa aaccaattaa acccagtagt 1500
106     ggtgactgtg ggctccattc aaagtgaagt cctaagccat gggagacact gatgtatgag 1560
107     gaatttctgt tcttccatca cctccccccc cccgccacc cccactgcc aagaacttgg 1620
108     aaatagtgat ttccacagt actccactct gactccaga gccaatcagt agccagcatc 1680
109     tgctccccct tccctccac cgcaggattt gggctcttgg aatcctgggg aacatagaac 1740
110     tcatgacgga agagttaga cctaacgaga aatagaaatg ggggaactac tgctggcagt 1800
111     ggaactaaga aagcccttag gaagaatttt tatatccact aaaatcaaac aattcagggg 1860
112     gtgggctaag cacgggccat atgaataaca tgggtgtgctt cttaaaatag ccataaaggg 1920
113     gagggactca tcatttccat ttacccttct tttctgacta tttttcagaa tctctcttct 1980
114     tttcaagttg ggtgatattg tggtagattc taatggcttt attgcagcga ttaataacag 2040
115     gcaaaaggaa gcagggttgg tttcccttct tttgttctt catctaagcc ttctgggttt 2100
116     atgggtcaga gttccgactg ccactcttga cttgtcagca aaaaaaaaaa aaaaaa 2156

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118 <210> SEQ ID NO: 6

119 <211> LENGTH: 355

120 <212> TYPE: PRT

121 <213> ORGANISM: Homo sapiens

122 <400> SEQUENCE: 6

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126     20          25          30
127     Gly Ala Gln Leu Leu Pro Pro Leu Tyr Ser Leu Val Phe Val Ile Gly
128     35          40          45
129     Leu Val Gly Asn Ile Leu Val Val Leu Val Leu Val Gln Tyr Lys Arg
130     50          55          60
131     Leu Lys Asn Met Thr Ser Ile Tyr Leu Leu Asn Leu Ala Ile Ser Asp
132     65          70          75          80
133     Leu Leu Phe Leu Phe Thr Leu Pro Phe Trp Ile Asp Tyr Lys Leu Lys
134     85          90          95
135     Asp Asp Trp Val Phe Gly Asp Ala Met Cys Lys Ile Leu Ser Gly Phe
136     100         105         110
137     Tyr Tyr Thr Gly Leu Tyr Ser Glu Ile Phe Phe Ile Ile Leu Leu Thr
138     115         120         125
139     Ile Asp Arg Tyr Leu Ala Ile Val His Ala Val Phe Ala Leu Arg Ala
140     130         135         140
141     Arg Thr Val Thr Phe Gly Val Ile Thr Ser Ile Ile Ile Trp Ala Leu
142     145         150         155         160
143     Ala Ile Leu Ala Ser Met Pro Gly Leu Tyr Phe Ser Lys Thr Gln Trp
144     165         170         175
145     Glu Phe Thr His His Thr Cys Ser Leu His Phe Pro His Glu Ser Leu
146     180         185         190
147     Arg Glu Trp Lys Leu Phe Gln Ala Leu Lys Leu Asn Leu Phe Gly Leu

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148		195		200		205	
149	Val	Leu	Pro	Leu	Leu	Val	Met
150		210		215		220	
151	Ile	Leu	Leu	Arg	Arg	Pro	Asn
152		225		230		235	
153	Ile	Phe	Val	Ile	Met	Ile	Ile
154				245		250	
155	Leu	Thr	Ile	Leu	Ile	Ser	Val
156				260		265	
157	Cys	Glu	Gln	Ser	Arg	His	Leu
158				275		280	
159	Ile	Ala	Tyr	Thr	His	Cys	Cys
160				290		295	
161	Gly	Glu	Arg	Phe	Arg	Lys	Tyr
162						310	
163	Ala	Val	His	Leu	Val	Lys	Trp
164						325	
165	Glu	Arg	Val	Ser	Ser	Thr	Ser
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171	<211> LENGTH: 2156						
172	<212> TYPE: DNA						
173	<213> ORGANISM: Homo sapiens						
174	<400> SEQUENCE: 7						
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177	atgcaactcc	gtgccagaag	gtgaacgaga	gggcctttgg	ggcccaactg	ctgccccctc	180
178	tgtactcctt	ggtatttgct	attggcctgg	ttggaaacat	cctgggtggc	ctggctcctg	240
179	tgcaatacaa	gaggctaaaa	aacatgacca	gcatctacct	cctgaacctg	gccatttctg	300
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181	tttttggtga	tgccatgtgt	aagatcctct	ctgggtttta	ttacacaggc	ttgtacagcg	420
182	agatcttttt	catcatcctg	ctgacgattg	acaggctacct	ggccatcgtc	cacgccgtgt	480
183	ttgccttgcg	ggcacggacc	gtcacttttg	gtgtcatcac	cagcatcatc	atttgggccc	540
184	tggccatctt	ggcttccatg	ccaggccttat	acttttccaa	gacccaatgg	gaattcactc	600
185	accacacctg	cagccttcac	tttcctcacg	aaagcctacg	agagtgggaag	ctgtttcagg	660
186	ctctgaaaact	gaacctcttt	gggctgggtat	tgccctttgtt	ggatcatgatc	atctgctaca	720
187	cagggattat	aaagattctg	ctaagacgac	caaatgagaa	gaaatccaaa	gctgtccggt	780
188	tgatttttgt	catcatgatc	atcttttttc	tcttttggac	cccctacaat	ttgactatac	840
189	ttattttctgt	tttccaagac	ttcctgttca	cccatgagtg	tgagcagagc	agacatttgg	900
190	acctggctgt	gcaagtgacg	gaggtgatcg	cctacacgca	ctgctgtgtc	aacctcagtga	960
191	tctacgcctt	cgttggtgag	aggttccgga	agtacctgcg	gcagttgttc	cacaggcgtg	1020
192	tggctgtgca	cctgggttaa	tggctcccct	tcctctccgt	ggacaggctg	gagagggtca	1080
193	gctccacatc	tccctccaca	ggggagcatg	aactctctgc	tgggttctga	ctcagacctat	1140
194	agggaagccaa	cccaaaaata	gcaggcgtga	cctgccaggc	acactgagcc	agcagcctgg	1200
195	ctctcccagc	caggttctga	ctcttggcac	agcatggagt	cacagccact	tgggatagag	1260
196	agggaatgta	atgggtggcct	ggggcttctg	aggcttctgg	ggcttcagtc	ttttccatga	1320
197	acttctcccc	tggtagaaaag	aagatgaatg	agcaaaaacca	aatattccag	agactgggac	1380

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199 ttgtcaacaa agtcacccac ttcccactat tgcttgacaca aaccaattaa acccagtagt 1500
200 ggtgactgtg ggctccattc aaagtgagct cctaagccat gggagacact gatgtatgag 1560
201 gaattttctgt tcttccatca cctccccccc cccgccaccc tcccactgcc aagaacttgg 1620
202 aaatagtgat ttccacagtg actccactct gagtcccaga gccaatcagt agccagcatc 1680
203 tgcttcccct tctctccac cgcaggattt gggctcttgg aatcctgggg aacatagaac 1740
204 tcatgacgga agagttgaga cctaacgaga aatagaaatg ggggaactac tgctggcagt 1800
205 ggaactaaga aagcccttag gaagaatttt tatatccact aaaatcaaac aattcagggg 1860
206 gtgggctaag cacgggccat atgaataaca tgggtgtgctt cttaaaatag ccataaaggg 1920
207 gagggactca tcatttccat ttacccttct tttctgacta tttttcagaa tctctcttct 1980
208 tttcaagttg ggtgatatgt tggtagattc taatggcttt attgcagcga ttaataacag 2040
209 gcaaaaggaa gcagggttgg ttcccttctt tttgttctt catctaagcc ttctgggttt 2100
210 atgggtcaga gttccgactg ccatcttggg cttgtcagca aaaaaaaaaa aaaaaa 2156
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213 <211> LENGTH: 355
214 <212> TYPE: PRT
215 <213> ORGANISM: Homo sapiens
216 <400> SEQUENCE: 8
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219 Asp Tyr Gly Asp Ala Thr Pro Cys Gln Lys Val Asn Glu Arg Ala Phe
220 20 25 30
221 Gly Ala Gln Leu Leu Pro Pro Leu Tyr Ser Leu Val Phe Val Ile Gly
222 35 40 45
223 Leu Val Gly Asn Ile Leu Val Val Leu Val Leu Val Gln Tyr Lys Arg
224 50 55 60
225 Leu Lys Asn Met Thr Ser Ile Tyr Leu Leu Asn Leu Ala Ile Ser Asp
226 65 70 75 80
227 Leu Leu Phe Leu Phe Thr Leu Pro Phe Trp Ile Asp Tyr Lys Leu Lys
228 85 90 95
229 Asp Asp Trp Val Phe Gly Asp Ala Met Cys Lys Ile Leu Ser Gly Phe
230 100 105 110
231 Tyr Tyr Thr Gly Leu Tyr Ser Glu Ile Phe Phe Ile Ile Leu Leu Thr
232 115 120 125
233 Ile Asp Arg Tyr Leu Ala Ile Val His Ala Val Phe Ala Leu Arg Ala
234 130 135 140
235 Arg Thr Val Thr Phe Gly Val Ile Thr Ser Ile Ile Ile Trp Ala Leu
236 145 150 155 160
237 Ala Ile Leu Ala Ser Met Pro Gly Leu Tyr Phe Ser Lys Thr Gln Trp
238 165 170 175
239 Glu Phe Thr His His Thr Cys Ser Leu His Phe Pro His Glu Ser Leu
240 180 185 190
241 Arg Glu Trp Lys Leu Phe Gln Ala Leu Lys Leu Asn Leu Phe Gly Leu
242 195 200 205
243 Val Leu Pro Leu Leu Val Met Ile Ile Cys Tyr Thr Gly Ile Ile Lys
244 210 215 220
245 Ile Leu Leu Arg Arg Pro Asn Glu Lys Lys Ser Lys Ala Val Arg Leu
246 225 230 235 240
247 Ile Phe Val Ile Met Ile Ile Phe Phe Leu Phe Trp Thr Pro Tyr Asn

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RAW SEQUENCE LISTING ERROR SUMMARY DATE: 06/06/2005
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:48; N Pos. 5,6,7

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:28,29

VERIFICATION SUMMARY

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Input Set : N:\Crf4\Refhold\10_folder\J734692.raw

Output Set: N:\CRF4\06062005\J734692.raw

L:327 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (15) SEQUENCE:
L:1013 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:48 after pos.:0